

CLAIMS

1 1. A method of transferring data in a networked system between a local
2 memory in a local system and a remote memory in a remote system, the local memory
3 including at least a first buffer region and a second buffer region, the method comprising:
4 receiving a remote direct memory access (RDMA) request;
5 associating the first buffer region with a first transfer operation;
6 determining whether a size of the first buffer region exceeds a maximum transfer
7 *size of the networked system;*
8 associating portions of the second buffer region with the first transfer operation if
9 the determining determines that the size of the first buffer region is less than the maximum
10 transfer size and associating portions of the second buffer region with a second transfer
11 operation if the determining determines that the size of the first buffer exceeds the
12 maximum transfer size; and
13 performing the first transfer operation.

1 2.. The method of claim 1, wherein the RDMA request relates to a read
2 operation and the first transfer operation comprises transferring data from the remote
3 memory to the local memory.

1 3. The method of claim 2, wherein if the size of the first buffer region exceeds
2 the maximum transfer size of the networked system, then the first buffer region is also
3 associated with the second transfer operation.

1 4. The method of claim 1, wherein the RDMA request relates to a write
2 operation and the first transfer operation comprises transferring data from the local
3 memory to the remote memory.

1 5. The method of claim 4, wherein if the size of the first buffer region exceeds
2 the maximum transfer size of the networked system, then the first buffer region is also
3 associated with the second transfer operation.

1 6. The method of claim 1, further comprising performing the second transfer
2 operation between the local memory and the remote memory.

1 7. The method of claim 1, wherein the networked system comprises one of an
2 NGIO system, a VI-system and an Infiniband system.

1 8. A tangible medium storing a plurality of program instructions, the program
2 instructions causing a networked system to carry out a method of transferring data
3 between a local memory in a local system and a remote memory in a remote system, the

4 local memory including at least a first buffer region and a second buffer region, the
5 method comprising:
6 receiving a remote direct memory access (RDMA) request;
7 associating the first buffer region with a first transfer operation;
8 determining whether a size of the first buffer region exceeds a maximum transfer
9 size of the networked system;
10 associating portions of the second buffer region with the first transfer operation if
11 the determining determines that the size of the first buffer region is less than the maximum
12 transfer size and associating portions of the second buffer region with a second transfer
13 operation if the determining determines that the size of the first buffer exceeds the
14 maximum transfer size; and
15 performing the first transfer operation.

1 9. The tangible medium of claim 8, wherein the RDMA request relates to a
2 read operation and the first transfer operation comprises transferring data from the remote
3 memory to the local memory.

1 10. The tangible medium of claim 9, wherein if the size of the first buffer
2 region exceeds the maximum transfer size of the networked system, then the first buffer
3 region is also associated with the second transfer operation.

1 11. The tangible medium of claim 8, wherein the RDMA request relates to a
2 write operation and the first transfer operation comprises transferring data from the local
3 memory to the remote memory.

1 12. The tangible medium of claim 11, wherein if the size of the first buffer
2 region exceeds the maximum transfer size of the networked system, then the first buffer
3 region is also associated with the second transfer operation.

1 13. The tangible medium of claim 8, further comprising performing the second
2 transfer operation between the local memory and the remote memory.

1 14. The tangible medium of claim 8, wherein the networked system comprises
2 one of an NGIO system, a VI system and an Infiniband system.

1 15. A system for transferring data in a networked system between a local
2 memory in a local system and a remote memory in a remote system, the local memory
3 including at least a first buffer region and a second buffer region, the system comprising:
4 a receiving device that receives a remote direct memory access (RDMA) request;
5 an RDMA managing device that receives the RDMA request, the RDMA
6 managing device determining whether a size of the first buffer region exceeds a maximum
7 transfer size of the networked system, the RDMA managing device associating portions of

8 the second buffer region with a first transfer operation if the RDMA managing device
9 determines that the size of the first buffer region is less than the maximum transfer size and
10 associates portions of the second buffer region with a second transfer operation if the
11 RDMA managing device determines that the size of the first buffer exceeds the maximum
12 transfer size; and
13 a transferring device that performs the first transfer operation between the local
14 memory and the remote memory.

1 16. The system of claim 15, wherein the RDMA request relates to a read
2 operation and the first transfer operation comprises transferring data from the remote
3 memory to the local memory.

1 17. The system of claim 16, wherein if the size of the first buffer region
2 exceeds the maximum transfer size of the networked system, then the first buffer region is
3 also associated with the second transfer operation.

1 18. The system of claim 15, wherein the RDMA request relates to a write
2 operation and the first transfer operation comprises transferring data from the local
3 memory to the remote memory.

1 19. The system of claim 18, wherein if the size of the first buffer region
2 exceeds the maximum transfer size of the networked system, then the first buffer region is
3 also associated with the second transfer operation.

1 20. The system of claim 15, further comprising performing the second transfer
2 operation between the local memory and the remote memory.

1 21. The system of claim 15, wherein the networked system comprises one of an
2 NGIO system, a VI system and an Infiniband system.

1 22. A system for transferring data in a networked system between a local
2 memory in a local system and a remote memory in a remote system, the local memory
3 including at least a first buffer region and a second buffer region, the system comprising:
4 a processor that receives a remote direct memory access (RDMA) request, the
5 processor determining whether a size of the first buffer region exceeds a maximum
6 transfer size of the networked system, the processor associating portions of the second
7 buffer region with a first transfer operation if the processor determines that the size of the
8 first buffer region is less than the maximum transfer size and associates portions of the
9 second buffer region with a second transfer operation if the processor determines that the
10 size of the first buffer exceeds the maximum transfer size; and

11 an input/output device that performs the first transfer operation between the local
12 memory and the remote memory.

1 23. The system of claim 22, wherein the RDMA request relates to a read
2 operation and the first transfer operation comprises transferring data from the remote
3 memory to the local memory.

1 24. The system of claim 23, wherein if the size of the first buffer region
2 exceeds the maximum transfer size of the networked system, then the first buffer region is
3 also associated with the second transfer operation.

1 25. The system of claim 22, wherein the RDMA request relates to a write
2 operation and the first transfer operation comprises transferring data from the local
3 memory to the remote memory.